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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/570,809	03/06/2006	Ian David Wood	KEL036PA	4883
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STEVENS & SHOWALTER LLP 7019 CORPORATE WAY DAYTON, OH 45459-4238			EXAMINER AYRES, TIMOTHY MICHAEL	
			ART UNIT	PAPER NUMBER
			3637	
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			11/24/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/570,809	<b>Applicant(s)</b> WOOD, IAN DAVID	
	<b>Examiner</b> TIMOTHY M. AYRES	<b>Art Unit</b> 3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 7/24/09.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 28-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/24/09</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 42 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. While anti-magnetic materials are known the applicant does not describe how its particular location to the magnet affects the poles in reducing seal distortion. As taught by US Patent publication 2002/0100648 to Grupp anti magnetic materials such as ceramics are known. Since this application does not discuss pole location of the magnetic nor how putting the antimagnetic material where the applicant does would affect anything. The examiner does agree that the specification discusses why and what the anti magnetic material does, the specification does not discuss *how* this material affects the flux or reduces like-pole repulsion.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 28-51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. The phrase "biases said means" is indefinite since biases is a verb and requires a noun to cause said biasing. As best understood it is the shape and resiliency of the loop that causes a bias.

6. The last 3 lines of claim 28 are unclear as to what is being claimed. It is unclear how the alignment of the seals changes the magnetic attraction between the loops or how this will effect or affect the bias of the resiliently flexible seal. As best understood it is the magnetic force that overcomes the spring/bias of the resilient seal, but it is unclear how the alignment would ever increase this magnetic attraction and as best understood the bias does not affect the seal at all as there is only a seal when the magnet attraction is present. There is no structure in these 3 lines and the function required is unclear.

7. Claim 28 recites the limitation "said means" in line 10. There is insufficient antecedent basis for this limitation in the claim. It is unclear if said means is said magnetic means or is another means.

8. Claim 28 recites the limitation "a seal" in line 12. There is insufficient antecedent basis for this limitation in the claim. It is unclear if the seal in line 12 is the same as the seal line 6.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 28-30, 32-37, and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by WIPO Publication WO 02/073104 to Wood. Wood teaches a refrigerator having a container and a closure. A sealing loop (60) can have magnetic means (Wood '104, page 14, lines 20-27) and the other surface on the container that the sealing loop (60) cooperates with is the second sealing loop.

11. Claims 28, 30, 33, 37, and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by WIPO Publication WO 02/073104 to Wood. Wood teaches an embodiment as seen in figure 10 a refrigerator having a container and a closure. A sealing loop (336) can have magnetic means (Wood '104, page 18, lines 5-20) and the other surface on the container that the sealing loop (336) cooperates with is the second sealing loop. As best understood by the claim Wood '104 would bias since the loop is flexible resilience and uses magnetic attraction creates a seal.

12. Claims 28-39 are rejected under 35 U.S.C. 102(b) as being anticipated by the applicant admitted prior art on page 7 and 8 of the specification. On page 8 of the specification the applicant discusses that initially when conceiving the drawer systems

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as disclosed in WO 01/020237, WO 02/073104, WO 02/073105, and WO02/073107 that the applicant considered a typical drawer with a typical sealing loop (as mentioned on page 7 of the specification) where the seal parts would have sliding or wiping movement. The typical seal on page 7 of the specification includes a resiliently flexible seal with magnets which are used to attract the resilient seal parts into sealing contact. The use of the term attract implies that the seal is flexible enough to be pulled into contact by the magnet and therefore would provide a bias (as best understood by the claim) against such attraction. The specification and the four previous related applications teach about such disadvantages to the wear of the seal of such an arrangement. To overcome this problem as discussed in the remarks filed 7/24/09 and on page 9 of the specification, the current invention maintains a clearance between the web and other sealing surface such that only the ridges make sealing contact that reduces friction and therefore wear. Thus since the claims (except 40 and 41) do not recite any mention of such a clearance then the arrangement as discussed in the specification and initially conceived before the previous 4 related application would meet the claimed subject matter.

13. Claims 28, 30, 33, 37-40, 43-47, 50, and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 6,464,312 to Tenhundfeld. Tenhundfeld teaches a container having an access aperture closable by a closure (20). A first sealing loop (40) has a trace heater (92) and a magnet (82). The second sealing loop (28) includes a magnet (36) and as seen in figure 3 has ridges that define web that maintain a gap or

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clearance from the first sealing loop (40). "a lateral direction" is not defined in the claim and there appears to be no structure or function that would prevent a structure from being a pivoted closure. Since the closure does open the access aperture by pivoting in a lateral direction.

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 42, 48, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant admitted prior art on page 7 and 8 of the specification in view of Official Notice. Regarding claim 42, the examiner took Official Notice that is well known to use antimagnetic materials next to magnets to control the direction of flux from pole to pole. US Patent Publication 2002/0100648 to Gupp is the supporting document to this as element (330) is made from an antimagnetic material and used to prevent and control the flux of the electric magnets. Therefore at the time of the invention it would have been obvious for a person of ordinary skill in the art to add anti-magnetic material to the backside of the seals to prevent unwanted attachment of other ferrous materials.

16. Regarding claims 48 and 49, the examiner took Official Notice that it is well known to have a downward flange of insulation on the inside of a door edge next to a

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seal to help increase the energy efficiency and/or protect the interior of the container from extreme thermal variances. US Patent 3,077,644 to Kesling is the supporting document as it has insulation flanges on both sides of the seal. Therefore at the time of the invention it would have been obvious for a person of ordinary skill in the art to add a downward flange to the closure as an insulating barrier to help increase the energy efficiency of the seal.

17. Claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant admitted prior art on page 7 and 8 of the specification in view of US Patent 4,538,380 to Colliander. Applicants admitted prior art discloses every element as claimed and discussed above except parallel ridges. Colliander teaches a seal with ridges (41) as seen in figure 6. At the time of the invention it would have been obvious for a person of ordinary skill in the art to modify the refrigerator of Applicants admitted prior art by adding the ridges to the seal as taught by Colliander to reduce friction.

18. Claims 40, 41, 43-47 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant admitted prior art on page 7 and 8 of the specification in view of US Patent 6,464,312 to Tenhundfeld. Applicants admitted prior art discloses every element as claimed and discussed above except a trace heater. Tenhundfeld teaches a seal with a trace heater (92). The seal (28) includes a magnet (36) and as seen in figure 3 has ridges that define web that maintain a gap or clearance from the first sealing loop (40). At the time of the invention it would have been obvious for a



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person of ordinary skill in the art to modify the refrigerator of Applicants admitted prior art by adding the trace heater and the sealing loop structures as taught by Tenhundfeld to eliminate sweating and to be simple to attach while providing a seal which has alignment that can handle lateral movements/adjustments.

19. Claims 28-39 and 42-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over United Kingdom Patent GB 602,329 to Earle in view of US Patent 3,055,193 to Smith. Earle teaches a refrigerator having a container (41) and a closure (54). The upper edges of the container (41) make a snug fit with the lower edge of the closure (54). These edges are considered to be the sealing loops. Earle does not expressly disclose the sealing loops include magnetic means. Smith teaches a sealing loop (14) having a magnetic means (34) and a strip heating element (30). At the time of the invention it would have been obvious for a person of ordinary skill in the art to modify the refrigerator of Earle by adding the sealing loop of Smith to edge of the container or closure to increase the energy efficiency by creating a better seal.

20. Regarding claim 42, the examiner took Official Notice that is well known to use antimagnetic materials next to magnets to control the direction of flux from pole to pole. US Patent Publication 2002/0100648 to Gupp is the supporting document to this as element (330) is made from an antimagnetic material and used to prevent and control the flux of the electric magnets. Therefore at the time of the invention it would have been obvious for a person of ordinary skill in the art to add anti-magnetic material to the backside of the seals to prevent unwanted attachment of other ferrous materials.

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21. Regarding claims 48 and 49, the examiner took Official Notice that it is well known to have a downward flange of insulation on the inside of a door edge next to a seal to help increase the energy efficiency and/or protect the interior of the container from extreme thermal variances. US Patent 3,077,644 to Kesling is the supporting document as it has insulation flanges on both sides of the seal. Therefore at the time of the invention it would have been obvious for a person of ordinary skill in the art to add a downward flange to the closure as an insulating barrier to help increase the energy efficiency of the seal.

22. Claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over United Kingdom Patent GB 602,329 to Earle in view of US Patent 3,055,193 to Smith as applied to claims 28-39 and 42-51 above, and further in view of US Patent 4,538,380 to Colliander. Earle in view of Smith discloses every element as claimed and discussed above except parallel ridges. Colliander teaches a seal with ridges (41) as seen in figure 6. At the time of the invention it would have been obvious for a person of ordinary skill in the art to modify the refrigerator of Earle in view of Smith by adding the ridges to the seal as taught by Colliander to reduce friction.

23. Claims 28-42 and 47-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over United Kingdom Patent GB 602,329 to Earle in view of US Patent 5,309,680 to Kiel. Earle teaches a refrigerator having a container (41) and a closure

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(54). The upper edges of the container (41) make a snug fit with the lower edge of the closure (54). These edges are considered to be the sealing loops. Earle does not expressly disclose the sealing loops include magnetic means. Kiel teaches two cooperating sealing loops (36,38) each having magnetic means (44,66). The sealing loop (38) has ridges next to the web as seen in figures 3 and 5. At the time of the invention it would have been obvious for a person of ordinary skill in the art to modify the refrigerator of Earle by adding the sealing loops of Kiel to edge of the container and closure to increase the energy efficiency by creating a better seal.

24. Regarding claim 42, the examiner took Official Notice that is well known to use antimagnetic materials next to magnets to control the direction of flux from pole to pole. US Patent Publication 2002/0100648 to Gupp is the supporting document to this as element (330) is made from an antimagnetic material and used to prevent and control the flux of the electric magnets. Therefore at the time of the invention it would have been obvious for a person of ordinary skill in the art to add anti-magnetic material to the backside of the seals to prevent unwanted attachment of other ferrous materials.

25. Regarding claims 48 and 49, the examiner took Official Notice that it is well known to have a downward flange of insulation on the inside of a door edge next to a seal to help increase the energy efficiency and/or protect the interior of the container from extreme thermal variances. US Patent 3,077,644 to Kesling is the supporting document as it has insulation flanges on both sides of the seal. Therefore at the time of the invention it would have been obvious for a person of ordinary skill in the art to add a

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downward flange to the closure as an insulating barrier to help increase the energy efficiency of the seal.

26. Claims 28-42 and 47-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over United Kingdom Patent GB 602,329 to Earle in view of US Patent 5,816,080 to Jeziorowski. Earle teaches a refrigerator having a container (41) and a closure (54). The upper edges of the container (41) make a snug fit with the lower edge of the closure (54). These edges are considered to be the sealing loops. Earle does not expressly disclose the sealing loops include magnetic means. Jeziorowski teaches two cooperating sealing loops (54) each having magnetic means (118,120). The sealing loop (54) has resilient webs (106,108,110,112). At the time of the invention it would have been obvious for a person of ordinary skill in the art to modify the refrigerator of Earle by adding the sealing loops of Jeziorowski to edge of the container and closure to increase the energy efficiency by creating a better seal.

27. Regarding claim 42, the examiner took Official Notice that is well known to use antimagnetic materials next to magnets to control the direction of flux from pole to pole. US Patent Publication 2002/0100648 to Gupp is the supporting document to this as element (330) is made from an antimagnetic material and used to prevent and control the flux of the electric magnets. Therefore at the time of the invention it would have been obvious for a person of ordinary skill in the art to add anti-magnetic material to the backside of the seals to prevent unwanted attachment of other ferrous materials.

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28. Regarding claims 48 and 49, the examiner took Official Notice that it is well known to have a downward flange of insulation on the inside of a door edge next to a seal to help increase the energy efficiency and/or protect the interior of the container from extreme thermal variances. US Patent 3,077,644 to Kesling is the supporting document as it has insulation flanges on both sides of the seal. Therefore at the time of the invention it would have been obvious for a person of ordinary skill in the art to add a downward flange to the closure as an insulating barrier to help increase the energy efficiency of the seal.

### ***Response to Arguments***

29. Applicant's arguments filed 7/24/09 have been fully considered but they are not persuasive. The phrase in the speciation ... "whereupon the ridges maintain clearance between the web and sealing surface." Is a valid discussion of the wear and therefore over come the 112.1 rejection since the examiner was not originally aware that a clearance was maintained. With regards to the arguments towards 112.1 claim 18 (now 42), a further explanation is provided above with essential missing description being *how* this antimagnetic material under the magnet will prevent like-pole repulsion.

30. In regards to the arguments towards Wood '104, first off there is nothing in the claim that would prevent the use of such two-component movement and second off the claims are broad enough that this is not limited to a drawer configuration as seen by the addition of the rejection of a second embodiment of Wood '104

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31. In regards to the arguments towards Smith, the cross -section of the seal is only attached at a single side and therefore would hinge about that point in addition to being made out of rubber and therefore would have flexibility. As best understood by the claim it unclear as to what is biasing and appears to be irrelevant if sealing contact is made.

32. In regards to the official notice of anti magnet material, US Patent Publication 2002/0100648 to Gupp uses as an antimagnetic material (330) to help control the flux, this is considered sufficient teaching as it teaches what the material is made of and the applicant has not sufficiently explained how their use of the antimagnetic material effects the magnetic poles.

33. In regard to the official notice of the downward flange, US Patent 3,077,644 to Kesling is an example of a door with a seal and flanges around the seal to increase energy efficiency.

34. In regards to the arguments towards Kiel, the examiner is unclear as to what the differences of the claimed invention to Kiel are. It appears the applicant is comparing the disclosed invention and not the claimed invention. Furthermore the examiner does not understand how or why the seals of Kiel would jam together and how is this different from applicant's invention as it appears if Kiel's seals would jam than so would those of applicant's.

35. It is suggested that the applicant combine claims 29, 40, and 41 into claim 28 as well as correcting the 112.2 issues of claim 28 to get closer to the invention as argued.

***Conclusion***

36. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY M. AYRES whose telephone number is (571)272-8299. The examiner can normally be reached on MON-THU 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. M. A./  
Examiner, Art Unit 3637  
11/18/2009

/Janet M. Wilkens/  
Primary Examiner, Art Unit 3637